DETAILED ACTION

This Office action is in response to Applicant's amendment and request for

reconsideration filed on January 27, 2010.

Claims 1, 3-8, 10, and 12-27 have been amended by examiner's amendment.

Claims 11 and 28-40 have been canceled.

Claim 2 has been canceled by examiner's amendment.

Claims 1, 3-10, 12-27 are currently pending.

Terminal Disclaimer

The terminal disclaimer filed on January 27, 2010 disclaiming the terminal portion

of any patent granted on this application which would extend beyond the expiration date

of US Patent 7,487,513 has been reviewed and is accepted. The terminal disclaimer

has been recorded.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37

CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

1. In a client-server architecture, a method comprising:

providing, at a server of the client-server architecture, a Web service having a

plurality of operations available to a plurality of clients of the client-server architecture

via a plurality of underlying ports of the Web service, wherein each underlying port of

the Web service defines (a) the plurality of operations of the Web service available via the underlying port, (b) the communication protocol and/or bindings used by the operations available through the respective underlying port of the Web service, and (c) one or more messages used by the plurality of operations of the Web service available via the respective underlying port;

accessing, via a client of the plurality of clients in the client server architecture, a logical port to a service endpoint interface at the server, wherein the service endpoint interface provides the plurality of clients access to the plurality of operations of the Web service through the plurality of underlying ports of the Web service, and wherein the logical port comprises an abstraction of an underlying port of the plurality of underlying ports of the Web Service available to the client through the service endpoint interface;

selecting, at the client, an item of configuration information in the logical port to configure the logical port to access a first subset of the plurality of operations of the Web service from the client through the logical port to the service endpoint interface, wherein the service endpoint interface provides the access to the first subset of the plurality of operations of the Web service through at least one of the plurality of underlying ports of the Web service; [[and]]

accessing, from the client, the first subset of the plurality of operations of the Web service through the logical port based on the configuration of the logical port, wherein the first subset of the plurality of operations are accessed through the configured logical port to the service endpoint interface which has access to the underlying port of the Web service[[.]];

providing, at a second client of the client-server architecture, access to the plurality of operations of the Web service through the service endpoint interface to the second client by configuring a second logical port to the service endpoint interface, wherein configuring the second logical port to the service endpoint interface configures access to a second subset of the plurality of operations of the Web service through a second underlying port of the Web service via the service endpoint interface, the

second subset of the plurality of operations of the Web service being different at least in part than the first subset of the plurality operations; and

accessing the second subset of the plurality of operations of the Web service through the second logical port configured at the second client.

Claim 2. (Canceled).

3. The method of claim 1, further comprising providing a value for the selected item of configuration information to define, at least in part, a [[the]] configuration of the logical port service endpoint interface, wherein the first configuration value comprises:

an access address for the [[first]] configuration of the logical port service endpoint interface.

4. The method of claim 3, wherein the access address for the [[first]] configuration of the logical port service endpoint interface comprises: a Uniform Resource Locater (URL) for the [[first]] configuration of the logical port of the service endpoint interface.

5. The method of claim 1, further comprising providing a value for the selected item of configuration information to define, at least in part, a configuration of the logical port, wherein the value for the selected item of configuration information comprises: an authentication type for the configuration of the logical port service endpoint interface.

6. The method of claim 5, wherein the authentication type for the configuration of the logical port comprises: one or more of client certificates for the [[first]] configuration of the logical port service endpoint interface.

7. The method of claim 1, <u>further comprising providing a value for the selected item of</u> <u>configuration information to define, at least in part, a configuration of the logical port</u>, wherein the value for the selected item of configuration information comprises: a transport guarantee for the configuration of the <u>logical port</u> ~~service endpoint interface~~.

8. The method of claim 7, wherein the transport guarantee for the configuration<u> of the</u> <u>logical port</u> comprises: an encryption type for the configuration of the <u>logical port</u> ~~service endpoint interface~~.

10. The method of claim 10, <u>further comprising providing a value for the selected item of</u> <u>configuration information to define, at least in part, a configuration of the logical port</u>, wherein the value for the selected item of configuration information [[to]] define<u>s</u> a name for the configuration of the <u>logical port</u> ~~service endpoint interface~~.

12. A <u>non-transitory</u> computer-accessible storage medium having instructions stored thereon that, when executed in a client-server architecture, cause a client and a server to execute a method comprising:

      providing, at the server of the client-server architecture, a Web service having a plurality of operations available to a plurality of clients of the client-server architecture via a plurality of underlying ports of the Web service, wherein each underlying port of the Web service defines (a) the plurality of operations of the Web service available via the underlying port, (b) the communication protocol and/or bindings used by the operations available through the respective underlying port of the Web service, and (c) one or more messages used by the plurality of operations of the Web service available via the respective underlying port;

accessing, via a client of the plurality of clients in the client server architecture, a logical port to a service endpoint interface at the server, wherein the service endpoint interface provides the plurality of clients access to the plurality of operations of the Web service through the plurality of underlying ports of the Web service, and wherein the logical port comprises an abstraction of an underlying port of the plurality of underlying ports of the Web Service available to the client through the service endpoint interface;

selecting, at the client, an item of configuration information in the logical port to configure the logical port to access a first subset of the plurality of operations of the Web service from the client through the logical port to the service endpoint interface, wherein the service endpoint interface provides the access to the first subset of the plurality of operations of the Web service through at least one of the plurality of underlying ports of the Web service; [[and]]

accessing, from the client, the first subset of the plurality of operations of the Web service through the logical port based on the configuration of the logical port, wherein the first subset of the plurality of operations are accessed through the configured logical port to the service endpoint interface which has access to the underlying port of the Web service[[.]];

providing, at a second client of the client-server architecture, access to the plurality of operations of the Web service through the service endpoint interface to the second client by configuring a second logical port to the service endpoint interface, wherein configuring the second logical port to the service endpoint interface configures access to a second subset of the plurality of operations of the Web service through a second underlying port of the Web service via the service endpoint interface, the second subset of the plurality of operations of the Web service being different at least in part than the first subset of the plurality operations; and

accessing the second subset of the plurality of operations of the Web service through the second logical port configured at the second client.

13. The non-transitory computer-accessible storage medium of claim 12, wherein the item of configuration [[to]] provides a HyperText Transfer Protocol (HTTP) proxy address for a [[the]] configuration of the logical port service endpoint interface.

14. The non-transitory computer-accessible storage medium of claim 12, wherein the item of configuration [[to]] provides an access address for a [[the]] configuration of the logical port service endpoint interface.

15. The non-transitory computer-accessible storage medium of claim 12, wherein the item of configuration [[to]] provides a Uniform Resource Locator (URL) for a [[the]] configuration of the logical port service endpoint interface.

16. The non-transitory computer-accessible storage medium of claim 12, wherein the item of configuration to specify specifies an authentication type for a [[the]] configuration of the logical port service endpoint interface.

17. The non-transitory computer-accessible storage medium of claim 12, wherein the item of configuration to specify specifies a transport guarantee for a the first configuration of the logical port service endpoint interface.

18. The non-transitory computer-accessible storage medium of claim 12, wherein the item of configuration to specify specifies a name for [[the]] a configuration of the logical port service endpoint interface.

19. ~~A web service client to execute at a client device~~ A client device executing a Web service client within a client-server architecture, wherein the Web service client comprises:

a logical port ~~of the Web Service client~~ to access a Web service provided by a server within the client-server architecture, the Web service having a plurality of operations available to the Web service client of the client-server architecture via a plurality of underlying ports of the Web service, wherein each underlying port of the Web service defines (a) the plurality of operations of the Web service available via the underlying port, (b) the communication protocol and/or bindings used by the operations available through the respective underlying port of the Web service, and (c) one or more messages used by the plurality of operations of the Web service available via the respective underlying port;

the Web service client to access a service endpoint interface at the server through the logical port ~~of the client~~, wherein the service endpoint interface provides the Web service client access to the plurality of operations of the Web service through the plurality of underlying ports of the Web service, and wherein the plurality of underlying ports of the Web service, and wherein the logical port comprises an abstraction of an underlying port of the plurality of underlying ports of the Web service available to the Web service client through the service endpoint interface;

the Web service client to select an item of configuration in the logical port to configure the logical port to access [[to]] a first subset of the plurality of operations of the Web service ~~from the client~~ through ~~the logical port to~~ the service endpoint interface at the server, wherein the service endpoint interface provides [[the]] access to the first subset of the plurality of operations of the Web service through at least one of the plurality of underlying ports of the Web service[[.]];

a second logical port to access a second subset of the plurality of operations of the Web service through the service endpoint interface at the server wherein the service endpoint interface provides access to the second subset of the plurality of operations of

the Web service through at least one of the plurality of underlying ports of the Web service via the service endpoint interface, the second subset of the plurality of operations of the Web service being different at least in part than the first subset of the plurality of operations; and

the Web service client to select an item of configuration in the second logical port to configure the second logical port to access the second subset of the plurality of operations of the Web service.

20. The client device ~~The Web service client~~ of claim 19, wherein the Web service client ~~logical port~~ specifies [[an]] a HyperText Transfer HyperText Transfer Protocol (HTTP) proxy for ~~the first configuration of~~ configuring the logical port ~~service endpoint interface~~.

21. The client device ~~The Web service client~~ of claim 19, wherein the Web service client ~~logical port~~ specifies an access address for configuring the logical port ~~the first configuration of the service endpoint interface~~.

22. The client device ~~The Web service client~~ of claim 21, wherein the specified access address is a Uniform Resource Locator (URL) for configuring the logical port ~~the first configuration of the service endpoint interface~~.

23. The client device ~~The Web service client~~ of claim 19, wherein the Web service client ~~logical port~~ specifies an authentication type for configuring the logical port ~~the first configuration of the service endpoint interface~~.

24. The client device ~~The Web service client~~ of claim 23, wherein the specified authentication type is a certificate based authentication type.

25. The client device ~~The Web service client~~ of claim 19, wherein the Web service client ~~logical port~~ specifies a name for configuring the logical port ~~the first configuration of the service endpoint interface~~.

26. The client device ~~The Web service client~~ of claim 19, wherein the Web service client ~~logical port~~ specifies a transport layer security protocol to be implemented for configuring the logical port ~~the first configuration of the service endpoint interface~~.

27. The client device ~~The Web service client~~ of claim 26, wherein the specified transport layer security protocol is based on a Secure Socket Layer protocol.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Spencer Hunter on authority and on behalf of Gregory D. Caldwell (Reg. #39,926) on May 4, 2010.

Allowable Subject Matter

Claims 1, 3-10, and 12-27 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach nor render obvious, in the specific combinations and manner recited within the claims, the features of:

accessing, via a client of the plurality of clients in the client server architecture, a logical port to a service endpoint interface at the server, wherein the service endpoint interface provides the plurality of clients access to the plurality of operations of the Web

service through the plurality of underlying ports of the Web service, and wherein the logical port comprises an abstraction of an underlying port of the plurality of underlying ports of the Web Service available to the client through the service endpoint interface;

selecting, at the client, an item of configuration information in the logical port to configure the logical port to access <u>a first subset of</u> the plurality of operations of the Web service from the client through the logical port to the service endpoint interface, wherein the service endpoint interface provides the access to the <u>first subset of the</u> plurality of operations of the Web service through at least one of the plurality of underlying ports of the Web service; [[and]]

accessing, from the client, the <u>first subset of</u> plurality of operations of the Web service through the logical port based on the configuration of the logical port, wherein the <u>first subset of the</u> plurality of operations are accessed through the configured logical port to the service endpoint interface which has access to the underlying port of the Web service[[.]]<u>;</u>

<u>providing, at a second client of the client-server architecture, access to the plurality of operations of the Web service through the service endpoint interface to the second client by configuring a second logical port to the service endpoint interface, wherein configuring the second logical port to the service endpoint interface configures access to a second subset of the plurality of operations of the Web service through a second underlying port of the Web service via the service endpoint interface, the second subset of the plurality of operations of the Web service being different at least in part than the first subset of the plurality operations</u> *(supported by Applicant's specification on page 22, ¶0041)*<u>; and</u>

<u>accessing the second subset of the plurality of operations of the Web service through the second logical port configured at the second client.</u>

Closest Prior Art:

Warshavaksy et al. (US 2007/0204279) teaches a business service system that allows a user of a client application to specify the provider of a business service [web service] and to specify the communications protocols and transport mechanism to be used when invoking such a business service [web service] (see ¶0016, read as configuring a first logical port to invoke a web service). However, Washavaksy does not teach nor render obvious, in the specific combinations and manner recited within the claims, configuring by a client application a logical port to access a first subset of the plurality of operations of the Web service through at least one of the plurality of underlying ports of the Web service, nor for that matter the limitation of providing, at a second client of the client-server architecture, access to a second subset of the plurality of operations of the Web service through the service endpoint interface to the second client by configuring a second logical port to the service endpoint interface, wherein configuring the second logical port to the service endpoint interface configures access to the second subset of the plurality of operations of the Web service through a second underlying port of the Web service via the service endpoint interface.

Blitniak et al. (US 7,475,145) teaches a system for accessing a service endpoint interface (i.e. "http://localhost/ibm/wsdl/myService.asp'>", see col. 1, line 35, col. 2, line 12) via a first and second logical ports (i.e. a "soap" port or a "http" port) for accessing multiple configuration of a service endpoint interface (see col. 1, line 35, col. 2, line 12, read as a SOAP configuration, a HTTP configuration, and a SMTP configuration). However, Blitniak does not teach nor render obvious, in the specific combinations and

manner recited within the claims, configuring by a client application a logical port to

access a first subset of the plurality of operations of the Web service through at least

one of the plurality of underlying ports of the Web service, nor for that matter the

limitation of providing, at a second client of the client-server architecture, access to a

second subset of the plurality of operations of the Web service through the service

endpoint interface to the second client by configuring a second logical port to the

service endpoint interface, wherein configuring the second logical port to the service

endpoint interface configures access to the second subset of the plurality of operations

of the Web service through a second underlying port of the Web service via the service

endpoint interface.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BRENDAN HIGA whose telephone number is (571)272-

5823. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Thomas can be reached on (571)272-6776. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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